

Date: Thursday, 10/04/2008 4:00:42 PM
 User: Julie Lecocq

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 350 SKIDTUBE ASSEMBLY LH
 Job Number : 38542
 Estimate Number : 10262
 P.O. Number :
 This Issue : 10/04/2008 S.O. No. :
 Prsht Rev. : NC Drawing Number : D2750 REV E
 First Issue : // Type : LANDING GEAR Project Number : N/A
 Previous Run : 38541 Drawing Revision : E
 Material :
 Due Date : 05/05/2008 Qty: 1 Um: Each
 Written By :
 Checked & Approved By : JD 08.4.10
 Comment :
 Est Rev: I 02.09.25 Rearranged procedure steps KJ
 Est Rev: J 06-03-23 As per Rev D JLM
 Est Rev: K 06-07-13 As per dsi9343 EC
 Est Rev: L 07-07-28 Added SS Wearplates(Rev E) JLM
 Verified By: EC

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Photocopy blue file and type labels per PPP D350-636-011 CHG 003

2.0 D26003BENT



Comment: Qty.: 1.00000 Each(s)/Unit Total : 1.00000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2600-3-Bent Extrusion (Bent)

B-38463

ALM

8-5-1

3.0 D2744



Comment: Qty.: 1.00000 Each(s)/Unit Total : 1.00000 Each(s)

Cap

Batch: B37768 BE 08/05/08

4.0 SKIDTUBES 1- SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2-Drill pilot holes as per Dwg D2750 sheet 3 (D2750-1 details). Drill using drill Jig DT8150 & DT8863.

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8863 and cut

ALM
8-5-1

75285-6

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 10/04/2008 4:00:42 PM
User: Julie Lecoq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 38542

Part Number: D350636011

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

as per dwg D2750.

4-Drill pilot holes for Detail G using DT8330

5-Open up holes for Detail B to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 5 holes per side) as per dwg D2750. Open up holes for ground handling and detail E to 0.500" (8 holes per side)

6-Drill pilot holes for wearplates as per Dwg D2750 using DT8108

****Make sure that wearplate holes are on bottom of tube**** Open 4 aft wearplate holes to 0.250". Open remaining wearplate holes to 0.297"

7-Open up holes of Detail A to 0.297" (total of 2 holes per side)

9-Weld D2744 Cap as per Dwg D2750 and QSL004. Fill grooves in bend left from bending as per QSI 004 A/R Aluminum Rod *M10+263 BE 08/05/08*

10-Grind welds flush as per Dwg D2750

12- Scribe batch# inside per dwg D2750

5.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

08/05/08 (X1)

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

08/05/08 (X)

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SL 8-5-12

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

① # 8-5-12

9.0

D2739



Comment: Qty.: 1.00000 Each(s)/Unit Total: 1.00000 Each(s)

Web

Batch: *39071*

SL 8-5-12

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 10/04/2008 4:00:42 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 38542

Part Number: D350636011

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

10.0

D34901



Comment: Qty.: 4.00000 Each(s)/Unit Total : 4.00000 Each(s)

Crossbolt spacer

Batch: *23824*

BE 08/05/13

11.0

D34903



Comment: Qty.: 4.00000 Each(s)/Unit Total : 4.00000 Each(s)

Crossbolt spacer

Batch: *23825*

BE 08/05/13

12.0

D2743



Comment: Qty.: 8.00000 Each(s)/Unit Total : 8.00000 Each(s)

Crossbolt Spacer

Batch: *237767*

BE 08/05/13

13.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open up holes of Detail E and ground handling to 0.625" (total of 8 holes per side)
as per dwg D2750.

2-Open up holes of Detail B to 0.750" (total of 4 holes per side)
as per dwg D2750.

3- Open float hole to 0.500" (4 per side)

4-Chamfer holes of Detail B, E, ground handling and float holes per dwg D2750 (welding instructions on
sheet 4)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R

Sikaflex-291

batch: *107804*

exp. date: *8-7-31*

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004
(welding instructions on sheet 4)

SL8-5-12

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 10/04/2008 4:00:43 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 38542

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

A/R Aluminum Rod batch: *M107263* *BF 08/05/13*

9-Grind welds flush as per Dwg D2750

10-Spot face ground handling holes section P-P (total of 4 places per side) as per dwg D2750

11-Deburr holes

28-514

14.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

S 08/05/22 *(XL)*

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/05/22 *(XL)*

16.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Pressure wash as per QSI 005

FL 08/06/03

17.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) as per Dart QSI 005 4.3

M 107925

BF 08/06/04

18.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect for foreign object per QSI 024

08-06-04 *(XL)*

19.0

ALS41032225



Comment: Qty.: 42.00000 Each(s)/Unit Total : 42.00000 Each(s)

Insert

Batch: *M100489*

HL

20.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install inserts as per Dwg D2750

HL 08-06-04 *(XL)*

523729
38542
S.287 08.36
#1 315.4 F
#2 --- F
#3 --- F
#4 --- F
30mm

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 16/05/2008 11:26:40 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001, Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 38542

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install inserts as per Dwg D2750

AND PER DSI9413 REV.A

JS 08-06-04

(20)

21.0

D2745

Bushing



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Bushing

Batch: B36230

JS

22.0

D353525

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: B38867

JS

23.0

D353625

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: B38565

JS

24.0

D35371

Wearpad



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

WEARPAD

Batch: (2X) => B37749 (1X) => 36426 JS

25.0

D37941

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Gasket

Batch: B39279

JS

26.0

D37931

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearshoe

Batch: B39277

JS

08-06-04

(X1)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 16/05/2008 11:26:40 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 38542

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

27.0

D37911

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Wearplate

1339276

SH

28.0

D37943

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Gasket

1339361

SH

29.0

D37933

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Wearshoe

1339479

SH

30.0

D36721

Phenolic Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

Phenolic Washer

1339275

SH

31.0

AN526C1032R10

Screw



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Screw

M1108062

SH

32.0

AN526C1032R18

Screw



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Screw

M1108079

SH

33.0

D36311

Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

WASHER

Batch:

1338139

SH

34.0

D3488041

Blade Fitting Assembly, LH



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Blade Fitting, LH

Batch:

1338465

SH

08-06-04

(20)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 16/05/2008 11:26:40 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 38542

Part Number: D350636011

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

35.0	D3492041	Plug Assembly
------	----------	---------------



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)
PLUG ASSEMBLY
Batch: B38562 91d

36.0	D3492043	Plug Assembly
------	----------	---------------



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)
PLUG ASSEMBLY
Batch: B38563 91d

37.0	AN3C5A	Bolt
------	--------	------



Comment: Qty.: ~~38~~ 0000 Each(s)/Unit Total : 38.0000 Each(s)
Bolt 7 6h x
Batch: M107862 91d

38.0	AN3C6A	BOLT
------	--------	------



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
Bolt
Batch: M1105300 91d

39.0	AN3C7A	BOLT
------	--------	------



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
BOLT
Batch: N/A info 508/06/05

40.0	AN6C44A	BOLT
------	---------	------



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)
BOLT
Batch: M1107685 91d

41.0	AN8C35A	BOLT
------	---------	------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)
BOLT
Batch: M1106896 91d 08-06-04 (20)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 16/05/2008 11:26:40 AM
User: Linda Lacelle

Process Sheet

46
38

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 38542

Part Number: D350636011

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

42.0	AN960C10L	washer
------	-----------	--------



Comment: Qty.: 38 46.0000 Each(s)/Unit Total : 46.0000 Each(s)

washer

Batch: M108077

WASHER

43.0	AN960C816L	WASHER
------	------------	--------



Comment: Qty.: 2 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: M107520

NUT

44.0	MS210436	NUT
------	----------	-----



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

NUT

Batch: M107736

NUT

45.0	MS21083C8	NUT
------	-----------	-----



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

NUT

Batch: M107939

WASHER

46.0	NAS1515H3L	WASHER
------	------------	--------



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

WASHER

Batch: M107394

WASHER

47.0	NAS1515H8L	WASHER
------	------------	--------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: N/A

HAND FINISHING RESOURCE #1

48.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
------	-----------------	----------------------------



Comment: HAND FINISHING RESOURCE #1

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3"

batch: M105093

HL 08-06-08

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 16/05/2008 11:26:40 AM
User: Linda Lacejle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 38542

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

3-Install blade fitting D3488-041, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: M107804

EXP DATE: 08/10

4- Coat all exposed fasteners with "LPS Procyon"

batch: M104251

08.06.04 (X)

49.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

06/06/05 (X)

50.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

51.0

D2741

Blade, 350 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Blade

Batch: 36343

36343

08/06/05 (X)

52.0

AN8C21A

BOLT



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Bolt

Batch: M107924

08/06/05 (X)

53.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Washer

Batch: M107520

08/06/05 (X)

54.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

WASHER

Batch: M107581

08/06/05 (X)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 16/05/2008 11:26:40 AM
User: Linda Lapelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY LH

Job Number: 38542

Part Number: D350636011

Job Number:



Seq. #:

Machine Or Operation:

Description :

55.0

MS21083C8

NUT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Nut

Batch: M107939

AS 08/06/05 (X)

56.0

D34931

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: B38102

AS 08/06/05 (X)

57.0

D35321

Spacer



Comment: Qty.: 2.0000 (s)/Unit Total : 2.0000 (s)

batch:

B38161

AS 08/06/05 (X)

58.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

S 08/06/05 (X)

59.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Package as per PPP D350-636-011

G 08/06/05 (X)

60.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

AS 08/06/06
MF 08-06-06

Job Completion



B38542

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-636 REV E

REF FAA STC: SR00646SE

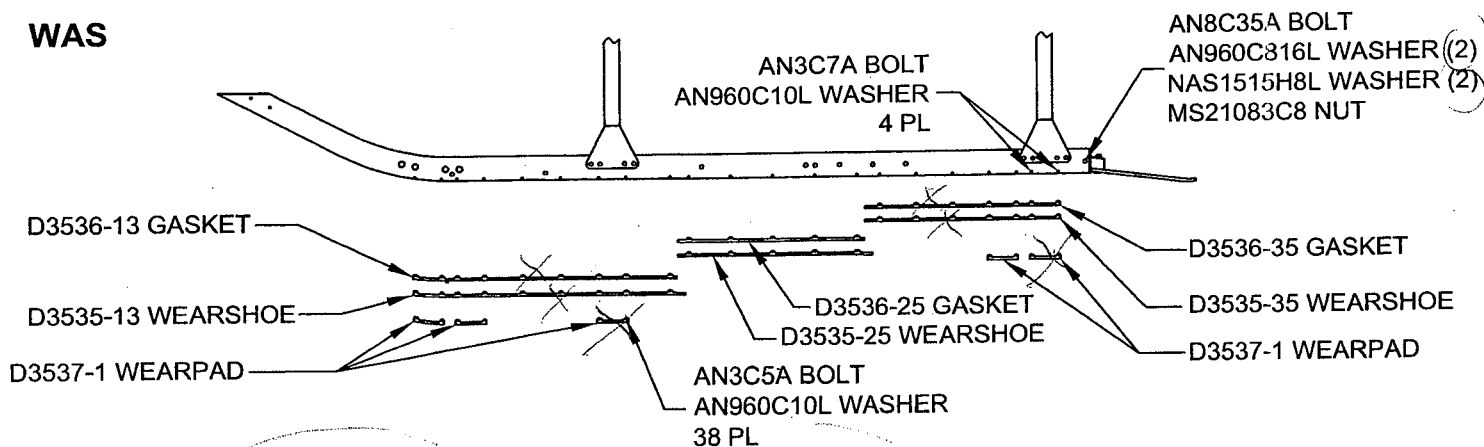
REF CANADIAN STC: SH99-7

FOR D350-636-011/-012/-013/-014 SKIDTUBES AT CHG 004:

TO IMPROVE THE INSTALLATION OF THE DART D350-636-011/-012/-013/-014 SKIDTUBES ONTO THE CROSSTUBES, THE INSTALLATION AND PART NUMBERS OF THE FWD AND AFT WEARSHOES/GASKETS HAVE BEEN REVISED AS SHOWN IN FIGURE 1 BELOW.

FOR EXISTING CUSTOMERS THAT WOULD LIKE TO IMPROVE THE INSTALLATION OF THE SKIDTUBE TO THE CROSSTUBE, REFER TO PAGE 3 OF THIS DOCUMENT

WAS



NOW

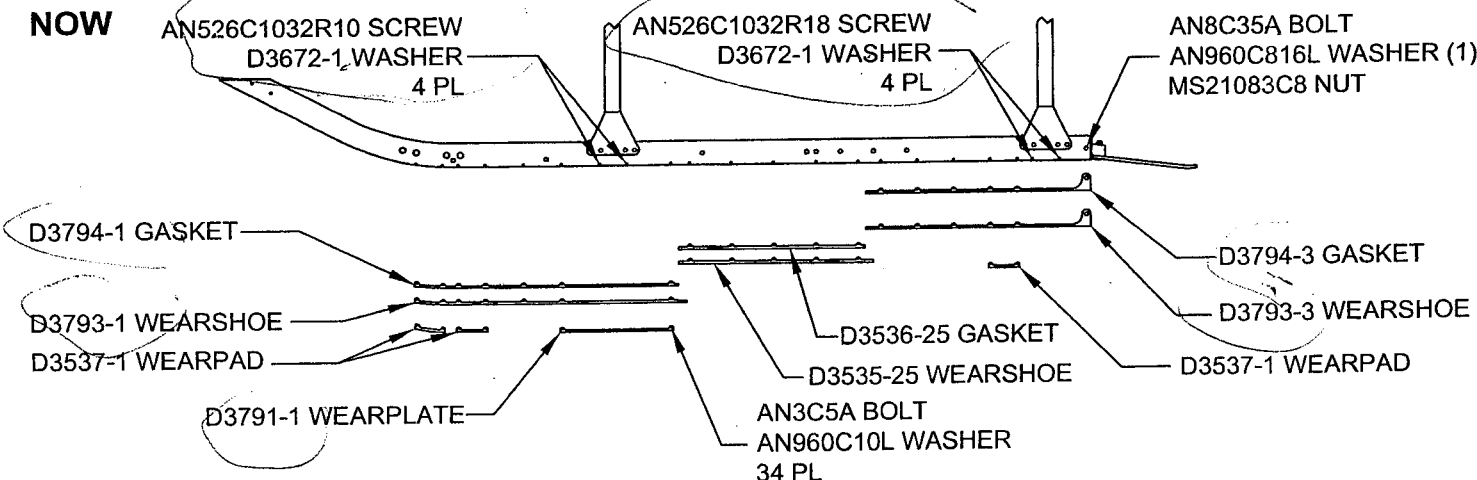


FIGURE 1 - D350-636-011/-012/-013/-014 AT CHG 004 AND INSTALLATION OF DSI 9413-011
(LOCATION OF AN526C1032RXX SCREWS ARE NOT TO BE USED TO MOUNT WEARSHOES)

A	NEW ISSUE	PH	08.05.14
REV.	DESCRIPTION		BY DATE
DESIGN	PH	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	PH		
CHECKED	PH	DRAWING NO.	REV. A
MFG. APPR.		DSI 9413	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		WEARSHOE INSTALLATION	NTS
DATE	08.05.14	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

PRELIMINARY ISSUE

DARTRELEASED
07.08.02

DESIGN <i>PH</i>	DRAWN BY <i>CB</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>HA</i>	DRAWING NO. D2750	REV. E SHEET 1 OF 5
DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS
REV	DATE	DESCRIPTION	
A	98.04.16	NEW ISSUE	
B	98.09.01	CHANGE MS24694-S293 TO AN8-16A	
C	98.11.18	ADD D2750-3 / D2750-4; INCORPORATE D2738 AND D2740	
D	06.01.05	ADD HOLES AND SPACERS FOR APICAL FLOATS INCORPORATE DEO 9133 / 9157	
E	07.05.17	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS; CHANGE INSERTS; ADD D3631-1; REMOVE QTY(38) NAS1515H3L; REMOVE QTY(10) NAS1515H8L; REMOVE D2741, QTY(2) AN960C816; REMOVE QTY(2) MS21083C8	

Qty -041	Qty -042	Qty -043	Qty -044	Part Number	Description
X				D2750-041	SKIDTUBE ASSEMBLY, LH
	X			D2750-042	SKIDTUBE ASSEMBLY, RH
		X		D2750-043	SKIDTUBE ASSEMBLY, LH
			X	D2750-044	SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-13	WEARSHOE
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3535-35	WEARSHOE
1	1	1	1	D3536-13	GASKET
1	1	1	1	D3536-25	GASKET
1	1	1	1	D3536-35	GASKET
5	5	5	5	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
42	42	42	42	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
38	38	38	38	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN3C7A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
46	46	46	46	AN960C10L	WASHER
2	2	2	2	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER
2	2	2	2	NAS1515H8L	WASHER

SHOP COPY

RETURN TO
ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 38542

COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



DESIGN <i>PH</i>	DRAWN BY <i>CB</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2750	REV. E SHEET 2 OF 5
DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS

GENERAL NOTES:

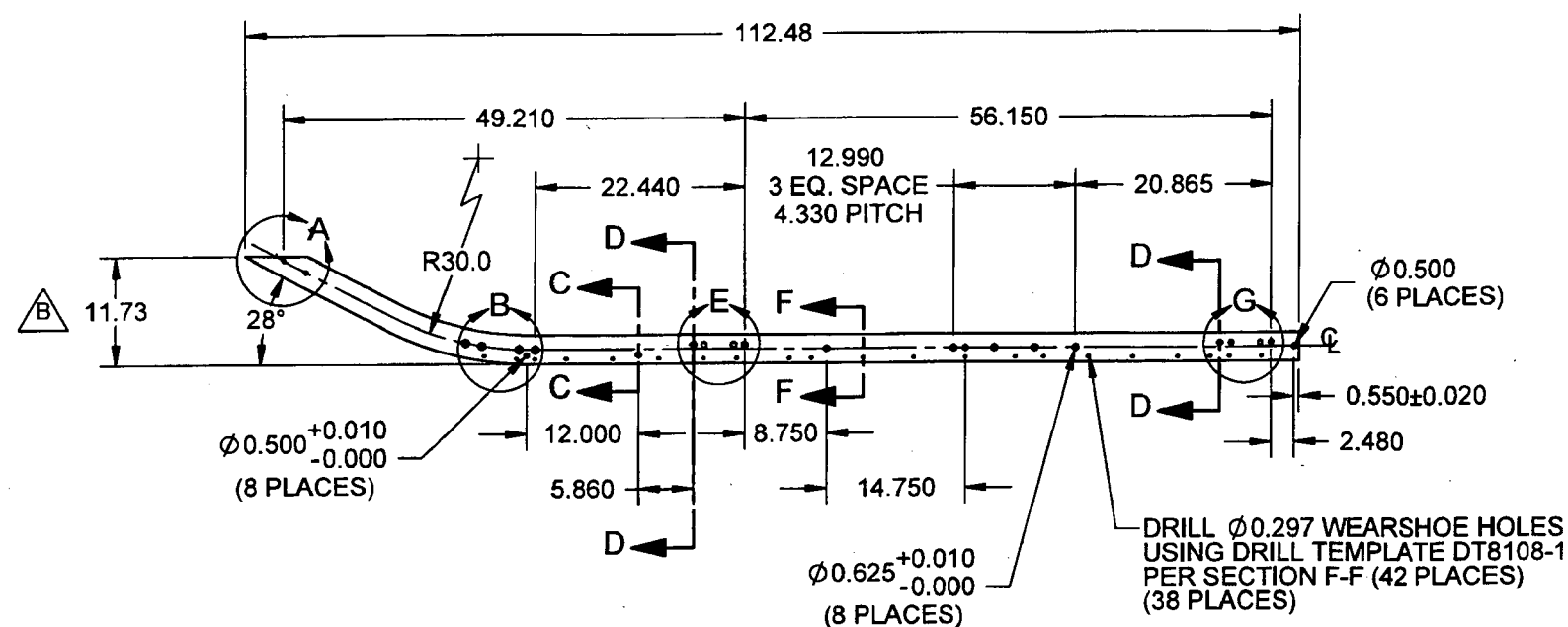
RELEASED
07-08-02 *[Signature]*

1. ALL DIMENSIONS ARE IN INCHES.
2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
4. DAMAGE TOLERANCE ON BENDING:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.150 ± 0.010 IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.15 ± 0.030 IN THE BENT PORTION OF THE TUBE.
5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS C-C, D-D AND F-F.
6. WELDING TO BE DONE PER DART QSI 004.
7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
8. FINISH:
ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
9. INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'F' SIZE HOLES ($\emptyset 0.297$) FOR WEARSHOE INSERTS.
10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3C5A/AN3C7A WEARSHOE BOLTS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS POWDER COATING WITH MEK DEGREASER.

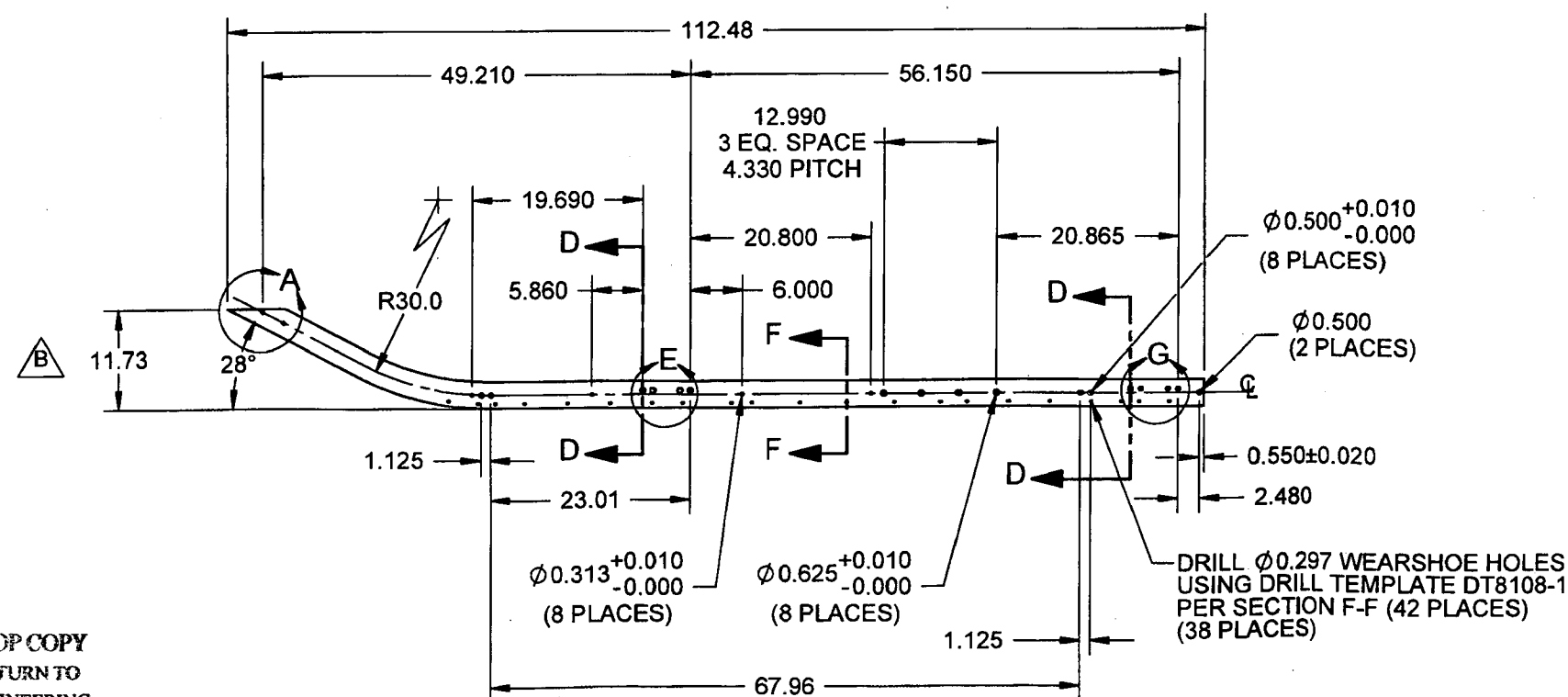
WORK COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *38542*

COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.

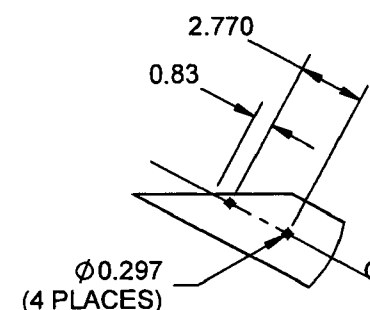
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.



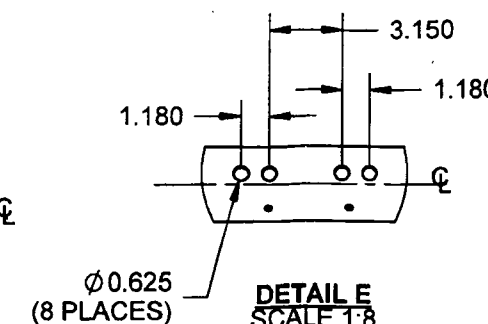
D2750-1 LH SKIDTUBE (SHOWN)
D2750-2 RH SKIDTUBE (OPPOSITE)



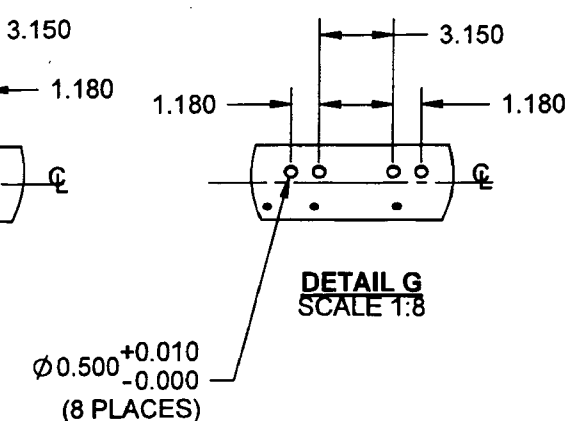
D2750-3 LH SKIDTUBE (SHOWN)
D2750-4 RH SKIDTUBE (OPPOSITE)



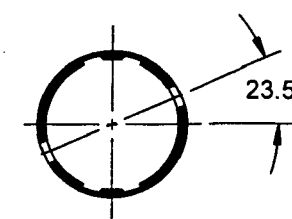
DETAIL A
SCALE 1:8



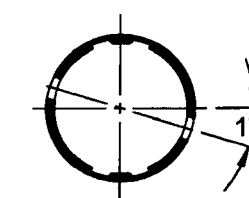
DETAIL E
SCALE 1:8



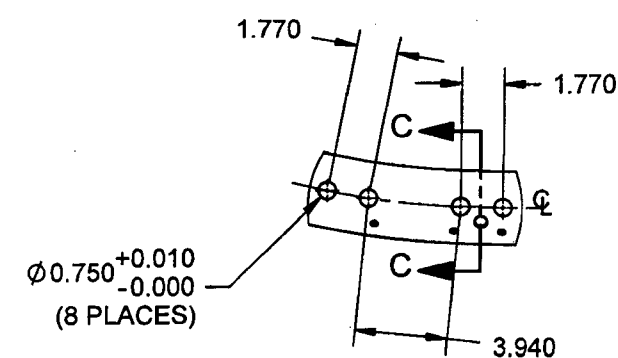
DETAIL G
SCALE 1:8



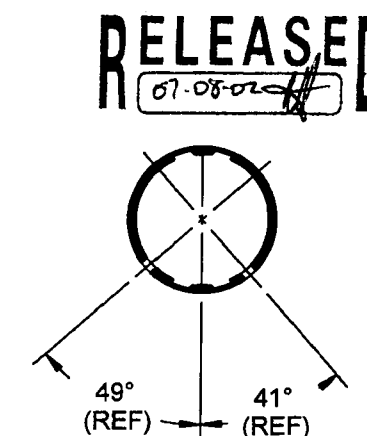
SECTION C-C
SCALE 1:4



SECTION D-D
SCALE 1:4



DETAIL B
SCALE 1:8
(ALL DIMENSIONS ARE
STRAIGHT LINE DIMENSIONS)



SECTION F-F
SCALE 1:4

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 38542

DESIGN <i>PH</i>	DRAWN BY <i>CB</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2750	REV. E SHEET 3 OF 5
DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY	SCALE 1:20
COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.			
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			

INSTALL ALS4-1032-225
INSERTS (4 PLACES)
AFTER FINISH

**D2750-041 ASSEMBLY (SHOWN)
D2750-042 ASSEMBLY (OPPOSITE)**

BOND D2739 WEB INTO D2750-1 (OR D2750-2)
OUTER TUBE WITH NON-STRUCTURAL
SIKAFLEX-241 ADHESIVE PER DART QSI 015.
NOTE: ENSURE THAT HOLES LINE UP.

INSTALL ALS4-1032-225
WEARSHOE INSERTS (38 PLACES)
AFTER FINISH

D2750-1 (LH) OR
D2750-2 (RH)

BLACK ANTI-SKID

2.0
(TYP)

1.78 (REF)
(TO D2739 WEB)

D3488-041
(OR D3488-042)

NO INSERT

WELDED SPACER
NOT REQUIRED

D3535-35
D3536-35

AN3C7A BOLT (REF)

RELEASED
07.05.17

D2744 CAP

DETAIL H
SCALE 1:5

INSTALL:
AN3C6A BOLT (1)
AN960C10L WASHER (1)
NAS1515H3L WASHER (1)
(4 PLACES)

SECTION J-J
SCALE 1:5

INSTALL AT AFTMOST
D3537-1 WEARPAD:
AN3C7A BOLTS (1)
AN960C10L WASHER (1)
(4 PLACES)

INSTALL:
AN3C5A BOLT (1)
AN960C10L WASHER (1)
(38 PLACES)

SECTION N-N
SCALE 1:5

D2743 SPACER (REF)
(TYP)

SECTION M-M
SCALE 1:5

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 x 45°
2) INSERT D2743 SPACER
3) WELD INTO PLACE
4) GRIND WELD FLUSH
5) DRILL OUT SPACER TO Ø0.484
6) SPOT FACE Ø0.750 (SECTION P-P ONLY)

(TYP)

SECTION P-P
SCALE 1:5

INSTALL:
AN6C44A BOLT (1)
D2745 BUSHING (2)
D3631-1 WASHER (2)
MS21043-6 NUT (1)
(4 PLACES)

SECTION Q-Q
SCALE 1:5

INSTALL:
AN8C35A BOLT (1)
AN960C816L WASHER (2)
NAS1515H8L WASHER (2)
MS21083C8 NUT (1)

SECTION R-R
SCALE 1:5

WELDING INSTRUCTIONS
1) CHAMFER HOLE 0.050 x 45°
2) INSERT D3490-1 SPACER (4 PLACES) INTO
Ø0.500 HOLES OR INSERT D3490-3 SPACER
(4 PLACES) INTO Ø0.750 HOLES
3) WELD INTO PLACE
4) GRIND WELD FLUSH
5) INSERT D3492-041 PLUG ASSEMBLY (8 PLACES)
INTO D3490-1 SPACER OR INSERT D3492-043
PLUG ASSEMBLY (8 PLACES) INTO D3490-3 SPACER
ON BOTH ENDS AFTER FINISH

SECTION K-K
(FOR Ø0.750 HOLES ONLY)
SCALE 1:5

D3490-3 SPACER
INSTALL:
D3492-043 PLUG
ASSEMBLY
(2 PLACES)
(TYP)

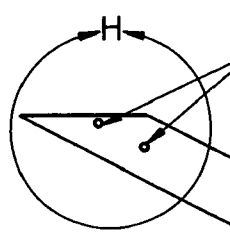
D3490-1 SPACER

INSTALL:
D3492-041 PLUG
SHOP COASSEMBLY
RETURN (2 PLACES)
(TYP)

SECTION L-L
(FOR Ø0.500 HOLES ONLY)
SCALE 1:5

DESIGN PH	DRAWN BY CB	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED PH	APPROVED [Signature]	DRAWING NO. D2750	REV. E SHEET 4 OF 5
DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY	SCALE 1:10
COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			

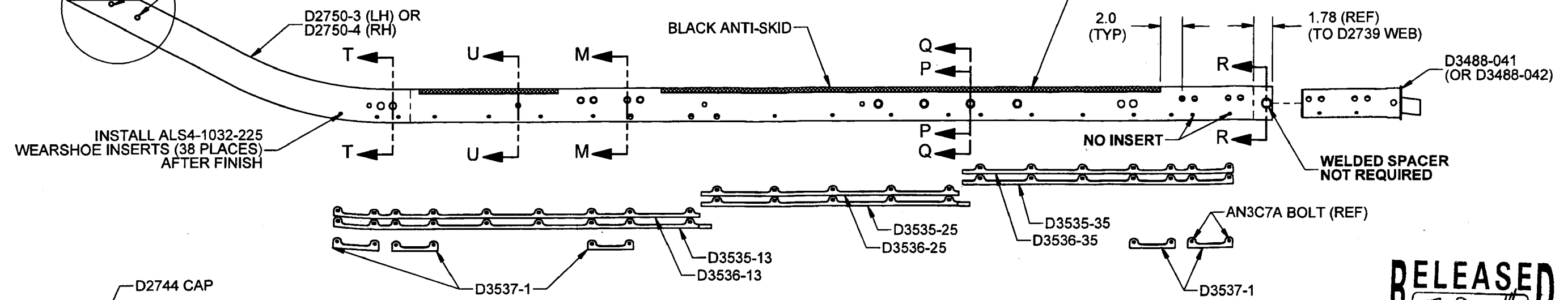
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 3852



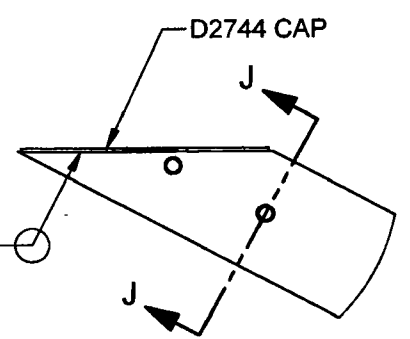
INSTALL ALS4-1032-225
INSERTS (4 PLACES)
AFTER FINISH

**D2750-043 ASSEMBLY (SHOWN)
D2750-044 ASSEMBLY (OPPOSITE)**

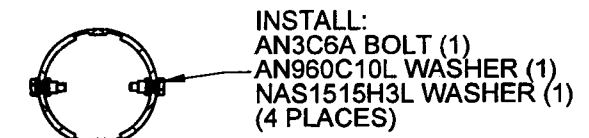
BOND D2739 WEB INTO D2750-3 (OR D2750-4)
OUTER TUBE WITH NON-STRUCTURAL
SIKAFLEX-241 ADHESIVE PER DART QSI 015.
NOTE: ENSURE THAT HOLES LINE UP.



RELEASED
07-08-02



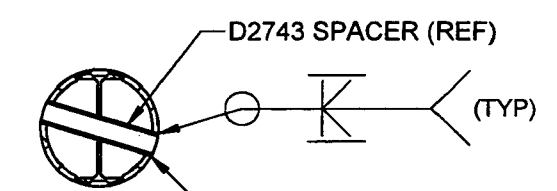
**DETAIL H
SCALE 1:5**



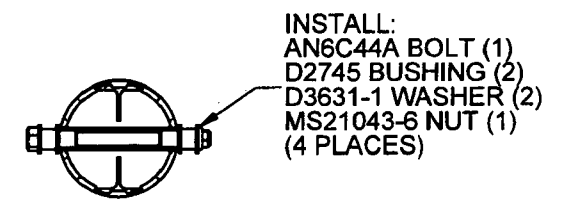
**SECTION J-J
SCALE 1:5**



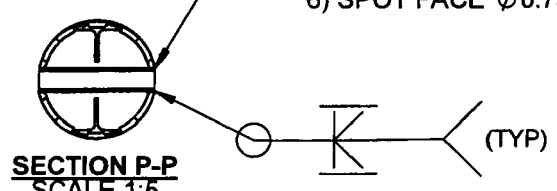
**SECTION N-N
SCALE 1:5**



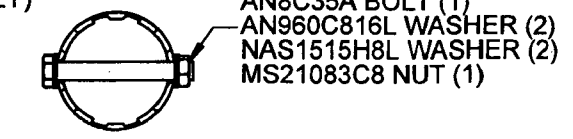
**SECTION M-M
SCALE 1:5**



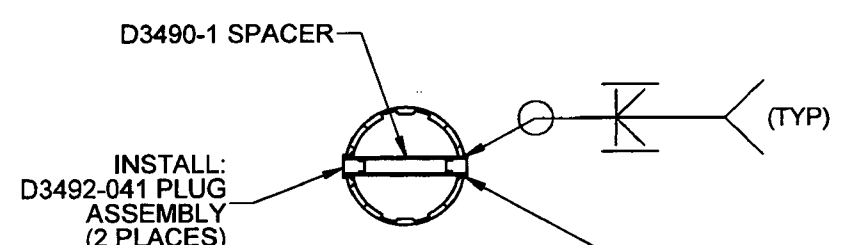
**SECTION Q-Q
SCALE 1:5**



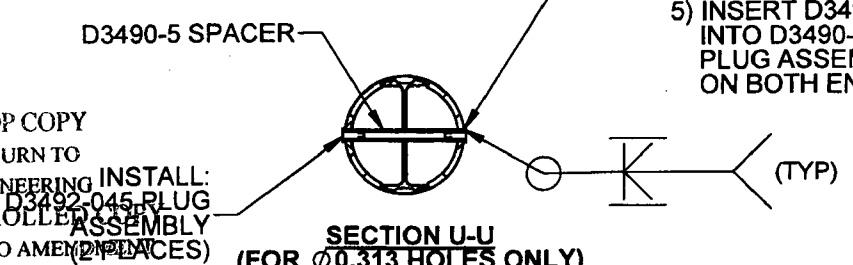
**SECTION P-P
SCALE 1:5**



**SECTION R-R
SCALE 1:5**



**SECTION T-T
(FOR Ø0.500 HOLES ONLY)
SCALE 1:5**




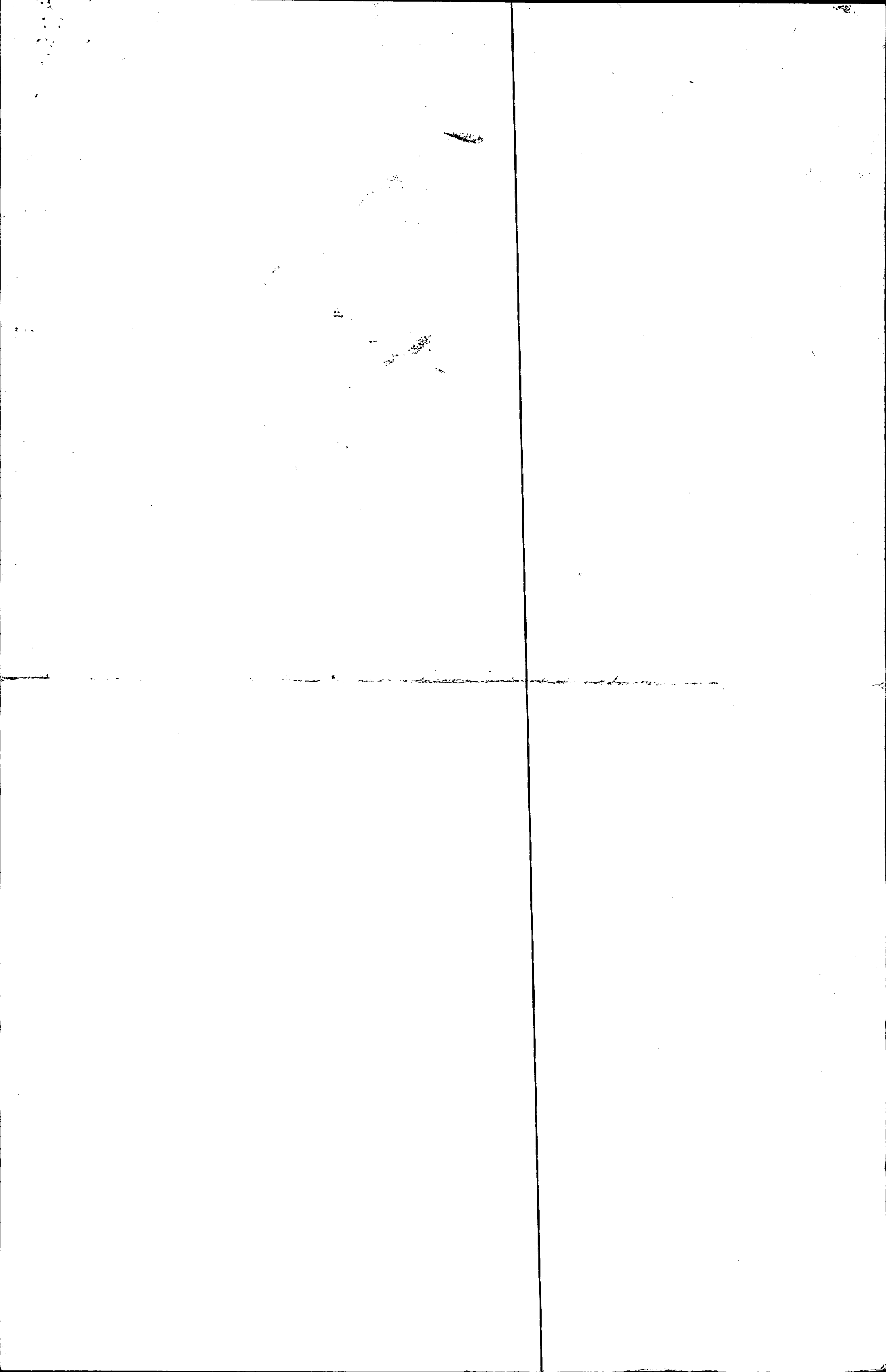
**SECTION U-U
(FOR Ø0.313 HOLES ONLY)
SCALE 1:5**

- WELDING INSTRUCTIONS**
- 1) CHAMFER HOLE 0.050 x 45°
 - 2) INSERT D3490-5 SPACER (4 PLACES) INTO Ø0.313 HOLES OR INSERT D3490-1 SPACER (4 PLACES) INTO Ø0.500 HOLES
 - 3) WELD INTO PLACE
 - 4) GRIND WELD FLUSH
 - 5) INSERT D3492-045 PLUG ASSEMBLY (8 PLACES) INTO D3490-5 SPACER OR INSERT D3492-043 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER ON BOTH ENDS AFTER FINISH

- WELDING INSTRUCTIONS**
- 1) CHAMFER HOLE 0.050 x 45°
 - 2) INSERT D2743 SPACER
 - 3) WELD INTO PLACE
 - 4) GRIND WELD FLUSH
 - 5) DRILL OUT SPACER TO Ø0.484
 - 6) SPOT FACE Ø0.750 (SECTION P-P ONLY)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 38542

DESIGN PH	DRAWN BY CB	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED PH	APPROVED 	DRAWING NO. D2750	REV. E SHEET 5 OF 5
DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY	SCALE 1:10
COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			



NO. 153

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliot
Job number: 38543
Part number: D350 636 011
Description: 2nd tube 350
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual:
Penetration:

pass[☒] fail[]
pass[☒] fail[]

UNACCEPTABLE

Cracks:
Undercut:
Pin holes:
Overlap (cold lap)
Porosity (surface):
Coloration:

pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]

Qualifier Det Duval Date of Test Coupon 08-05-07

Welder Det Barclay Elliot Date of Test Coupon 08-05-07

The above named individual is qualified in accordance with AWS D17.1.2001 to weld